

15-181-20245-00-00
STATE OF KANSAS - CORPORATION COMMISSION
ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

FORM O-2
 8-7-58
 12-3-86

TYPE TEST: Deliverability Open Flow **TEST DATE:** 6-2-86

COMPANY GOODLAND GAS COMPANY **LEASE** Wieck **WELL NO.** 1-35

COUNTY Sherman **LOCATION** SE $\frac{1}{4}$, SE $\frac{1}{4}$, NE $\frac{1}{4}$ **SECTION** 35 **TWP** 7S **RNG** 39W **ACRES**

FIELD Goodland **RESERVOIR** Niobrara **PIPELINE CONNECTION** KN Energy

COMPLETION DATE 4-4-83 **PLUG BACK TOTAL DEPTH** 1089 **PACKER SET AT** None

CASING SIZE 4 $\frac{1}{2}$ " **WT.** 9.5#/ft **LD.** **SET AT** 1111 **PERF.** 1060 **TO** 1070

TUBING SIZE None **WT.** **I.D.** **SET AT** **PERF.** **TO**

TYPE COMPLETION (Describe) Frac 100,700# Sd., 918 Bbls H₂O **TYPE FLUID PRODUCTION** Gas

PRODUCING THRU Casing **RESERVOIR TEMPERATURE, F** **BAR. PRESS - P_a** 13.2 ~~XXX~~ Psia

GAS GRAVITY - G_g 0.5837 **% CARBON DIOXIDE** 1.98 **% NITROGEN** 2.79 **API GRAVITY OF LIQUID**

VERTICAL DEPTH (ft) **TYPE METER CONN.** Orifice **(METER RUN)(PROVER) SIZE** 2.067

SHUT-IN PRESSURE: SHUT IN 5-27 19 86 AT (AM)(PM) TAKEN 5-30 19 86 AT (AM)(PM)

FLOW TEST: STARTED 5-30 19 86 AT (AM)(PM) TAKEN 6-2 19 86 AT (AM)(PM)

OBSERVED DATA **DURATION OF SHUT-IN** _____ HR.

SHUT-IN OR FLOW	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psia	DIFF. in. (h _w)(h _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psia	(P _w)(P _t)(P _c) psia	psia	(P _w)(P _t)(P _c) psia		
SHUT-IN	--	--	--	--	--	49.5	61.7	--	--	72	--
FLOW	0.625	--	--	63	--	17.8	31	--	--	72	--

RATE OF FLOW CALCULATIONS

COEFFICIENT (F _w)(F _d) Mcf/d	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m h_w}$	GRAVITY FACTOR G _g	FLOWING TEMP. FACTOR F _L	DEVIATION FACTOR F _{pv}	RATE OF FLOW R Mcf/d	GOR	Q _m
79.3	--	--	1.3089	0.9971	1.0011	44	--	--

(OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P_c)² = _____ (P_w)² = _____ P_d = _____ % (P_c - 14.4) + 14.4 = _____ (P_w)² = 0.207 (P_d)² = _____

$\frac{(P_c)^2 - (P_w)^2}{(P_c)^2 - (P_d)^2}$	$(P_c)^2 - (P_w)^2$	$\sqrt{\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}}$	LOG []	"n"	n x LOG []	ANTILOG	OPEN FLOW DELIVERABILITY EQUALS R x ANTILOG Mcf/d
3.757	2.970	1.265	0.102	0.7332	0.075	1.188	52

OPEN FLOW 52 **Mcf @ 14.65 psia** **DELIVERABILITY** **Mcf @ 14.65 psia**

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the 25th day of NOV, 1986.

Robert M. Richardson
 For Company

Witness (if any) _____
 For Commission _____

~~DEC 5 1986~~

Checked by _____
 DEC 1 1986